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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,738	12/05/2003	Joseph C. Deaton	87193AEK	1319

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EXAMINER
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GARRETT, DAWN L

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/729,738

Applicant(s)

DEATON ET AL.

Examiner

Dawn Garrett

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-14 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 9, 16-18, 20-22 and 24-29 is/are rejected.
- 7) ☒ Claim(s) 5, 7, 8, 10, 11, 15, 19 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1-30-04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because it is two paragraphs in length and may only be one paragraph in length. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

2. Claims 6, 9, 15, 17, 18 19 are objected to because of the following informalities:

In claims 6, 9, 15, 17, 18 19 "Rh." should be changed to "Rh,". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding claim 25, the word "means" is preceded by the word "filtering" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967). In this claim, it is unclear what is intended to be filtered.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-4, 6, 9, 16- 18, 20, 21, and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Thompson et al. (Us 2003/0017361 A1). Thompson et al. discloses organic light emitting displays comprising organometallic complexes comprising platinum, iridium, and osmium in the emissive layer (see abstract). The formula of the organometallic complexes is  $L_2MX$  (see abstract). The L ligands may include phenylindoles as shown in Figure 49 and described in paragraph 109. There may be 2 “L” ligands, which reads upon the requirement of a plurality of indole compounds per claim 6. With regard to claims 9 and 18, the phenylindole ligand of Figure 49 shows two methyl substituent groups, which comprise a total of two carbon atoms. With regard to claim 21, Thompson et al. disclose the emissive organometallic complex is within a host material (see abstract).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 22, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (US 2003/0017361 A1). Thompson et al. is relied upon as set forth above. Although Thompson et al. fails to exemplify a device with the phenylindole of Figure 49 doped into a host material in a specific amount, Thompson et al. does teach phosphorescent materials doped into a host at amounts of 6 % by weight (see par. 68). It would have been obvious to one of ordinary skill in the art at the time of the invention to have made a device with 6% by weight of phosphorescent phenylindole-containing organometallic complex in a host material, because Thompson et al. generally teaches that a suitable amount of phosphorescent material in the emissive layer is 6%. Thompson et al. further fails to teach specifically that the devices may be configured to emit white light; however, Thompson et al. does teach it is known to fine tune the color of emission (see abstract and par. 3-4). It would have been obvious to one of ordinary skill in the art at the time of the invention to have made a white light emitting device by combining different compounds of various emission colors, because Thompson et al. generally teaches it is known to fine tune the color of emission of the device. Although Thompson et al. fails to exemplify a device with phenylindole and a fluorescent material doped into a host material, Thompson et al. does teach in an example it is desirable to incorporate a fluorescent compound such as coumarin (see par. 191) in the layer with the phosphorescent material. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used a fluorescent material such as coumarin dye in the emissive layer, because Thompson et al. generally teach adding a fluorescent material to the emissive layer enhances the performance of the device.

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10. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. (US 2003/0017361) in view of Fukuoka et al. (US 2002/0168544). Thompson fails to teach the device comprises filters; however, Thompson et al. does teach it is known to color tune the device for emission color (see abstract). Fukuoka et al. '544 teaches white light is highly desired in the art and can be achieved by attaching a color filter to a display apparatus (see par. 5). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included a filter with the Thompson et al. display, because Fukuoka et al. teaches white light is highly desired and can be achieved by attachment of a filter.

***Allowable Subject Matter***

11. Claims 12-14 are allowed. Claims 15 and 19 are objected to for a minor informality as stated previously in this Office action, but contain allowable subject matter. Claims 5, 7, 8, 10, 11, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art is considered to be Thompson et al. (US 2003/0017361 A1), which is discussed in this Office action. The prior art fails to teach organometallic complexes as required by these claims.

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571)272-1523. The examiner can normally be reached Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached at (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dawn Garrett  
Primary Examiner  
Art Unit 1774

D.G.  
May 16, 2005